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ABSTRACT

This program guide is intended for the implementation of a dental assisting program in Florida secondary and postsecondary schools. The program guide describes the program content and structure, provides a program description, describes jobs under the program, and includes a curriculum framework and student performance standards for dental assisting courses. The curriculum framework outlines major concepts and content, laboratory activities, program specifics, and intended outcomes; the student performance standards guide lists each standard and the behaviors expected to show mastery of each standard. The guide also provides a test item bank and information on the following: facilities, equipment and supplies, and safety; program implementation (accreditation, student admission requirements, student learning guide, and student organizations) teacher professional development and professional organizations; and instructional resources (a list of 20 print materials, 20 reports in the ERIC database, 9 audiovisual aids, 2 journals, 10 publishers, and the Florida Educational Information Service with a list of its services). Appended to the program guide is a sample student learning guide that includes program title, intended outcome, learning activities, information sheets, self-check with answers, written test with answers, and a performance test. (KC)

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# FLORIDA VOCATIONAL PROGRAM GUIDE FOR

# DENTAL ASSISTING

U.S. DEPARTMENT OF EDUCATION
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Betty Castor, Commissioner

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# FLORIDA VOCATIONAL PROGRAM GUIDE FOR

# DENTAL ASSISTING

State of Florida
Department of Education
Tallahassee, Florida
Betty Castor, Commissioner
Affirmative action/equal opportunity employer

*Division of Vocational, Adult, and Community Education*
Bureau of Vocational Program and Staff Development

July 1989

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*NOTE: Please insert the latest version of the Curriculum Framework and Student Performance Standards, revised each year.

## INTRODUCTION

The Florida Vocational Program Implementation Guide can be applied to all vocational programs in Florida. This program guide, however, was developed specifically for the Dental Assisting program to provide information that will be useful to local school-district and community-college administrators, faculty and instructors, program advisory committee members, regional coordinating councils, and others charged with the responsibility of offering vocational education programs. The final planning and evaluation of any educational program, however, must be done within the context of local conditions. This publication will serve to identify the major concerns that should be considered in the organization, operation, and evaluation of a vocational education program.

Vocational education has evolved to meet the needs of students desiring to pursue selected careers or vocations. In general, vocational education is designed to provide programs, services, and activities that are realistic in light of present and future employment opportunities. In recent years, applications of science and technology have expanded rapidly, increasing the education and training required of personnel. The new technologies require many additional technical supportive staff to carry out both standardized and specialized procedures.

Today, vocational education is an increasingly viable option for students. The Florida Department of Education (DOE) shares with business, government, and industry the determination to provide opportunities for upward mobility to as many Floridians as possible. For this to become a reality, exemplary career educational programs must be created and these programs must be consistent throughout the state.

**State Board of Education Administrative Rule 6A-10.24: Articulation between universities, community colleges, and school districts** outlines steps and guidelines that will bring about a systematic interrelationship among Florida institutions offering similar or related courses and programs. The rule states, in part, that

> when a student transfers among postsecondary vocational-technical centers, community colleges, and universities, the receiving institution shall award credit for courses satisfactorily completed at the previous institutions when the courses are judged to be equivalent to courses offered at the receiving institution.

This program guide helps ensure that equivalency. Throughout Florida, vocational programs, if implemented according to the criteria described in this document, will help many citizens fill an important place in our state and national work force.

## PROGRAM CONTENT AND STRUCTURE

The content of this vocational program is based on occupational tasks and employability skills required on the job in the field of Dental Assisting. The criteria used for evaluating student performances are based on job performance standards.

This section includes an occupational description of Dental Assisting, related job titles, information about state certification requirements, the Florida Curriculum Framework and Student Performance Standards for Dental Assisting, and information about related frameworks and about a bank of test items.

### Occupational Description

The following description of dental assisting tasks has been abstracted from the Department of Professional Regulation, Board of Dentistry, Laws and Rules Relating to the Practice of Dentistry, Rules 21-G and Chapter 466.024, Florida Statutes:

> Dental assistants may take impressions for study casts but not for the purpose of fabricating any intraoral restorations or orthodontic appliance; place periodontal or surgical dressings; remove sutures; place or remove rubber dams and matrices; place or remove temporary restorations; apply cavity liners, varnishes, or bases; polish amalgam restorations; polish clinical crowns of the teeth for the purpose of removing stains but not changing the existing contour of the tooth; and obtain bacteriological cytological specimens not involving cutting of the tissue. All other remediable tasks shall be performed under the direct, indirect, or general supervision of a dentist, as determined by rule of the board, and after such formal or on-the-job training by the dental assistant as the board by rule may require.

See Section 21G-16.005, Remediable Tasks Delegable to Dental Assistants, of the Department of Professional Regulation, Board of Dentistry, Laws and Rules Relating to the Practice of Dentistry for a list of possible remediable tasks performed by dental assistants under general, direct, or indirect supervision.

### Job Titles

Job titles for Dental Assisting occupations are as follows:

Dental Assistant (FLOIS #10120401)
Dental Assisting (CIP #0317.010100)
Dental Auxiliary (CIP #0317.010100)

### State Certification Requirements

The Florida Board of Dentistry does not certify Dental Assistants. However, it does regulate their work by means of what is called "expanded functions." To perform expanded functions in the state of Florida, there are two available options:

OPTION 1

If the individual was graduated from an American Dental Association (ADA)-accredited dental hygiene or dental assistant school in the state of Florida, he or she should display the certificate where the remedial tasks are performed.

OPTION 2

If the individual did not graduate from an ADA-accredited school, he or she must take a course from an accredited school approved by the Florida Board of Dentistry. If the individual successfully completes the course, he or she may then display the certificate at his or her place of employment.

For additional information, contact the Florida Department of Professional Regulation, Board of Dentistry, (904) 488-6015.

**Curriculum Framework and Student Performance Standards***

The Health Occupations program area is a group of planned, specialized instructional programs structured to enable students to enter, to advance, and to refine prescribed competencies required for employment in a cluster of occupations or in a specific occupation chosen as a career objective.

The Dental Assisting program includes learning experiences that may combine courses, units of instruction, and practical experiences that are concerned with preparing students for employment as dental assistants and dental auxiliaries or to provide supplemental training for persons previously or currently employed in this occupation and to take the National Board Examination for Dental Assistants.

Vocational Education Program Course Standards: Public Service Education
(Florida Department of Education, Division of Vocational, Adult, and Community Education)

***NOTE:** Since the Curriculum Framework and Student Performance Standards are revised yearly, please check with your vocational dean or director for a current version each year.

CURRICULUM FRAMEWORK
FLORIDA DEPARTMENT OF EDUCATION

PROGRAM AREA: Health Occupations
EFFECTIVE DATE: July, 1989

PROGRAM TITLE: Dental Assisting

CODE NUMBER: Secondary _____ Postsecondary DEA0700
Florida CIP 0317.010100

SECONDARY SCHOOL CREDITS: ____ COLLEGE CREDITS: ____
POSTSECONDARY ADULT VOCATIONAL CREDITS: ____

APPLICABLE LEVELS: ___ 7-9 ___ 9-12 _x_ Other 30, 31
____ Postsecondary Adult Vocational ____ Postsecondary Vocational

CERTIFICATION COVERAGE: DENTAL HYG @5 DENTAL ASST 7
DENTAL TEC @7

I. **Major Concepts/Content.** The program is designed to prepare students for employment as dental assistants (66002431) and dental auxiliaries (dental assistants) or to provide supplemental training for persons previously or currently employed in this occupation and to take the National Board Examination for Dental Assistants. The program should meet the requirements of the American Dental Association and standards recommended by the Florida Board of Dentistry.

The content includes, but is not limited to, dental office and patient management, basic dental laboratory procedures, dental and general anatomy, dental terminology, nutrition, dental instruments and equipment, microbiology, dental pharmacology and anesthesia, chairside assisting and expanded functions, dental office emergencies/CPR, dental radiography, maintenance and asepsis of dental operatory and instrumentation, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudence, dental materials, and preventive dentistry.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **Laboratory Activities.** Students are provided with realistic clinical/laboratory experiences during an externship in dental offices and clinics as a part of this program.

III. **Special Note.** The Health Occupations Students of America, Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

In accordance with Section 233.0695, F.S., the minimum basic skills grade level required for exit from this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0. This grade level number corresponds to a

grade equivalent score obtained on a state-designated basic skills examination.

The cooperative method of instruction may be used for this program. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor, and the employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

The approximate length of this program for the average achieving student is 1,200 hours or an associate degree.

IV. **Intended Outcomes.** After successfully completing this program, the student will be able to:

01. Perform general office procedures.
02. Identify structures and functions of dental and general anatomy.
03. Identify, describe, and maintain dental instruments and equipment.
04. Identify principles of microbiology and disease prevention, and perform infection control procedures.
05. Identify the functions of pharmacology and anesthesia as they relate to dentistry.
06. Perform chairside assisting and expanded functions.
07. Assist in administering dental office emergency care and cardiopulmonary resuscitation.
08. Identify and perform dental radiographic procedures.
09. Identify properties and uses of dental materials, and manipulate them.
10. Describe principles and perform techniques of preventive dentistry.
11. Describe the legal and ethical responsibilities of the dental health care worker.
12. Demonstrate employability skills.
13. Demonstrate knowledge of sexually transmitted diseases (STDs), including AIDS.

STUDENT PERFORMANCE STANDARDS | EFFECTIVE DATE: July, 1989

PROGRAM AREA: Health Occupations | SECONDARY NUMBER: _____

PROGRAM TITLE: Dental Assisting | POSTSECONDARY NUMBER: DEA0700

01.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:

- 01.01 Maintain appointment control.
- 01.02 Maintain an active recall system.
- 01.03 Prepare and maintain accurate patient records.
- 01.04 Prepare and maintain patient financial records and collect fees.
- 01.05 Prepare and maintain office financial records.
- 01.06 Prepare and maintain dental office inventory control and purchasing.
- 01.07 Demonstrate public relations responsibilities of the secretary/receptionist.
- 01.08 Demonstrate skills on office equipment.
- 01.09 Maintain office environment.
- 01.10 Receive and dismiss patients and visitors.

02.0 IDENTIFY STRUCTURES AND FUNCTIONS OF DENTAL AND GENERAL ANATOMY--The student will be able to:

- 02.01 Identify structures and functions of head and neck anatomy, including bones, muscles, sinuses, salivary glands, nerves, and vessels.
- 02.02 Identify embryonic development of head, oral cavity, and teeth.
- 02.03 Identify teeth and their landmarks.
- 02.04 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
- 02.05 Recognize and describe oral pathological conditions.

03.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:

- 03.01 Identify various types, functions, and operations of dental operatory and laboratory equipment.
- 03.02 Identify types and functions of various dental instruments.
- 03.03 Maintain dental operatory equipment and instruments.

04.0 IDENTIFY PRINCIPLES OF MICROBIOLOGY AND DISEASE PREVENTION, AND PERFORM INFECTION CONTROL PROCEDURES--The student will be able to:

- 04.01 Differentiate between pathogenic and nonpathogenic microorganisms.
- 04.02 Describe pathogens and modes of disease transmission.
- 04.03 Differentiate between aseptic and nonaseptic environments.
- 04.04 Perform aseptic handwashing technique.
- 04.05 Describe methods of disinfection and sterilization.

05.0 IDENTIFY THE FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA AS THEY RELATE TO DENTISTRY--The student will be able to:

05.01 Identify drug requirements, agencies, and regulations.
05.02 Prepare and record a drug prescription.
05.03 Identify drug actions, side effects, indications, and contraindications.
05.04 Identify common drugs used in dentistry.
05.05 Prepare and apply topical anesthetic agent.
05.06 Identify properties of anesthetics.
05.07 Prepare syringes for the administration of local anesthetics.
05.08 Monitor nitrous oxide-oxygen conscious sedation.

06.0 PERFORM CHAIRSIDE ASSISTING AND EXPANDED FUNCTIONS--The student will be able to:

06.01 Apply principles of four-handed dentistry.
06.02 Evacuate and maintain the operating field.
06.03 Perform expanded functions as permitted by the Florida Board of Dentistry.
06.04 Assemble instruments and assist in general and specialty dental procedures.

07.0 ASSIST IN ADMINISTERING DENTAL OFFICE EMERGENCY CARE AND CARDIOPULMONARY RESUSCITATION--The student will be able to:

07.01 Describe dental office emergencies and their prevention and treatment.
07.02 Assist and maintain medical emergency care to include cardiopulmonary resuscitation.

08.0 IDENTIFY AND PERFORM DENTAL RADIOGRAPHIC PROCEDURES--The student will be able to:

08.01 Describe history, physics, and biological effects of ionizing radiation.
08.02 Identify parts of the X-ray machine, including accessories.
08.03 Demonstrate radiologic health-protection techniques.
08.04 Perform dark room/processing procedures, mix solutions.
08.05 Expose radiographs, utilizing intraoral/extraoral techniques.
08.06 Identify radiographic anatomical landmarks.
08.07 Mount radiographic surveys.
08.08 Maintain unexposed film inventory and storage.

09.0 IDENTIFY PROPERTIES AND USES OF DENTAL MATERIALS AND MANIPULATE THEM--The student will be able to:

09.01 Identify properties and uses of gypsum and manipulate it.
09.02 Identify properties and uses of restorative materials and manipulate them.
09.03 Identify properties and uses of dental cements and manipulate them.
09.04 Identify properties and uses of impression materials and manipulate them.
09.05 Identify properties and uses of acrylics and/or thermoplastics and manipulate them.

09.06 Identify properties and uses of waxes and manipulate them.
09.07 Perform dental laboratory procedures, to include the fabrication of casts, custom trays, and/or temporary crowns and bridges.

10.0 DESCRIBE PRINCIPLES AND PERFORM TECHNIQUES OF PREVENTIVE DENTISTRY--The student will be able to:

10.01 Identify and instruct patients on applicable methods of preventive dentistry.
10.02 Prepare set-up for oral prophylaxis and anticariogenic treatments.
10.03 Identify the elements of nutrition, basic food groups, and acceptable diets.
10.04 Identify deficiencies that manifest symptoms in the oral cavity and describe therapies.
10.05 Formulate and present diets to address specific dental needs.

11.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:

11.01 Define commonly used legal vocabulary relating to dentistry.
11.02 Describe legal and ethical considerations/obligations in the dental team-patient relationship.
11.03 Explain risk management.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

12.01 Conduct a job search.
12.02 Secure information about a job.
12.03 Identify documents that may be required when applying for a job.
12.04 Complete a job application.
12.05 Demonstrate acceptable behavior in job interview techniques.
12.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
12.07 Identify acceptable work habits.
12.08 Demonstrate knowledge of how to make job changes appropriately.
12.09 Demonstrate acceptable employee health habits.

13.0 DEMONSTRATE KNOWLEDGE OF SEXUALLY TRANSMITTED DISEASES (STDs), INCLUDING AIDS--The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of STDs.
13.02 Identify community resources and services available to the victims of STDs.
13.03 Identify at-risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of STDs.
13.04 Apply infection control techniques designed to prevent the spread of STDs to the care of all patients following Centers for Disease Control (CDC) guidelines.

**Related Frameworks**

See the current version of Vocational Education Program Course Standards: Public Service Education (Florida DOE, DVACE) for curriculum frameworks and SPSs for the following dental care programs:

Dental Hygiene
Dental Laboratory Assisting
Dental Laboratory Technology

**Test Item Bank**

A bank of test items for dental assisting may be developed under the auspices of the Florida DOE. Test items will be keyed to SPSs. For more information, please contact the Division of Vocational, Adult, and Community Education, Dissemination and Diffusion Section, Knott Building, Tallahassee, FL 32399, (904) 488-0405.

## FACILITIES

### Design Criteria

The facility should provide space and learning stations to enable the instruction to meet program objectives. Florida State Board of Education Rule 6A-2.032 specifies the size of space and occupant design criteria that school districts and community colleges must follow in planning and designing facilities for Health Occupations programs. The minimum, normal, and maximum space requirements for a one-time occupancy design capacity of twenty students are listed below.

| Program Facility | Minimum (sq. ft.) | Normal (sq. ft.) | Maximum (sq. ft.) |
|---|---|---|---|
| Laboratory | 1,360 * | 1,420 * | 1,500 * |
| Classroom, Related Instruction | 500 | 525 | 550 |
| Darkroom | 55 | 60 | 65 |
| Faculty Lockers | 85 | 90 | 95 |
| Student Lockers | 340 | 360 | 380 |
| Operatory | 340 | 360 | 380 |
| Reception | 340 | 360 | 380 |
| Storage, Materials | 120 | 125 | 130 |
| X ray | 125 | 135 | 145 |

### Equipment and Supplies

Equipment should be provided and utilized to enable students to achieve the objectives of the program. As much as possible, such equipment should be of the type and quality used in the field.

Audiovisual Equipment

Projection screen, 60-inch (minimum)
Projector, 35mm film loop
Projector, 35mm film strip
Projector, overhead
Cassette tape player
Chalkboard/corkboard
Videocassette recorder and television

*These figures represent respectively 68, 71, and 75 square feet per student.

## Equipment for Clinical Training

Skeletal and anatomic replicas
Clinical photography resources
One operatory per ten students
Models of teeth and mouth
Sample dentures, inlays, and crowns
Sample patient records
Dental floss, toothbrushes
Dental molds for plaster, stone, and wax models
Glow-germ kit
Paper cups
Sterilizing equipment
Emergency equipment, including an oxygen unit
Instructional charts (diagrams)
Rubber dam instruments and supplies
Specialty instruments: endodontic, surgical, pedodontic, periodontic, etc.
Microscopes
Dental patient chair and unit
Operator's stool
Dental assistant's stool
Operating light
Assistant's mobile cabinet
High- and slow-speed handpieces
Oral evacuation system
Safety glasses
Face masks
Latex rubber gloves
Model trimmer
Dental lathe
Bench engine
Dental vibrators
Patient bib and chain

## Equipment for Radiographic Training

Radiography operatories
Lead shielding or comparable protection units
Lead patient aprons, mechanical aids for making acceptable radiographs
Darkroom capacity/equipment, such as processing film, water temperature control, timer, safe light, work surface, manual processing tank, film-dryer hanging rack, viewbox units, and automatic x-ray processor
Teaching mannequin

## Instrument Kit

Dental-assisting students should be aware that they are required to purchase, rent, or borrow instrument kits. The following is one example of what such a kit contains.

Mouth mirror
Explorer
Cotton forceps
Spoon excavator
Bin-angle chisel
Wedelstaedt chisel
Hatchet
Mesial GMT
Distal GMT
Amalgam carrier
Amalgam condenser
Discoid-cleoid carver
Half-Hollenback carver
Sho-A-Carver
Loma-Linda carver
Wall carver
Teflon plastic instrument
Plastic instrument
Beavertail burnisher
Cement spatula
Dycal instrument
Alginate spatula
Plaster spatula
Lab knife
Tofflemire retainer
Anesthetic syringe
Suction tip
Impression syringe
Contra-angle handpiece
Latch-type mandrel
Screw-type mandrel
Butterfly matrix clip
Suture scissors

**Safety**

The Florida Board of Education establishes rules for the operation of public schools. Part III, Section B, Chapter 6A-2 of the State Board of Education Rules contains the standards for existing educational facilities. Subsections deal with the entire school facility in regard to such topics as electrical equipment; flammable materials; climate control and ventilation equipment; structural, material, and sound hazards; fire extinguishing equipment; surface finishes, decorations, and hazardous materials; storage; separation of spaces; fire doors, smoke doors, and smoke partitions; emergency evacuation drills; play area and traffic safety; stairs and fire escapes; exit access; general lighting/illumination; and other standards.

In dental health areas, the educational institutions often have safety policies and procedures regarding student use of equipment, tools, supplies, and materials.

## PROGRAM IMPLEMENTATION

This section includes information that may aid instructors in planning the implementation of the Dental Assisting program: accreditation, student admission requirements, information about sample student learning guides, and student organization participation.

### Accreditation

The Commission on Dental Accreditation of the American Dental Association has sole authority and responsibility for accrediting education programs in dental laboratory technology, dental hygiene and dental assisting, predoctoral and advanced dentistry, and other recognized dental specialties.

The accreditation process provides assurance that such education programs are of high quality and ultimately lead to quality dental patient care.

The Commission makes extensive use of consultants and an on-site evaluation team to ensure that accredited programs meet minimum educational standards. Accreditation standards address areas such as educational setting, community resources, administration, financial support, curriculum, admissions, faculty, facilities, learning resources, student services, and educational outcomes.

Applying for accreditation is a voluntary process. There are approximately 290 Commission-accredited dental assisting programs in the United States. There are about 200 accredited dental hygiene programs.

For specific information about meeting the standards for accreditation, contact the Commission on Dental Accreditation of the American Dental Association to request the document.

### Student Admission Requirements

Students enrolled in the Dental Assisting program should be able to benefit from the instructional content with reasonable expectations for employment as dental assistants or dental auxiliaries upon completion of the program.

The Dental Assisting program is offered to students at the postsecondary adult vocational level. In accordance with Section 233.0695, F.S., the minimum basic skills grade level required for this program is: Mathematics 8.0, Language 8.0. Grade level numbers correspond to a grade equivalent score obtained on a state-designated basic skills examination.

**Student Learning Guide**

As mentioned in Instructional Approach of Florida Vocational Education Program Implementation Guide, competency-based vocational instruction (CBVI) is the most appropriate instructional approach to teaching students to become competent in Dental Assisting. In order to implement CBVI effectively and efficiently, you and the students should have access to competency-based instructional materials, such as student guides or modules.

A sample student learning guide is provided in the Appendix of this program guide as an example for you to use when developing or adapting a set of learning guides or modules. This sample guide is not complete--it presents basic components of a competency-based student learning guide: an introduction, objectives, a list of resources, learning activities, information sheets, a self-check and answer sheet, an activity sheet, a written test, and a performance test. An answer key to the written test is included in the instructor version of the learning guide.

The following components are often included in a student learning guide:

The **introduction,** which includes the intended outcome, the SPS for which the guide is developed, and an introduction to the guide stating why this topic is important to study and what this guide is about (Other information, such as the relationship between this guide and other guides, can also be included on this sheet.)

The **objectives,** which include both knowledge and performance objectives if the SPS calls for hands-on performance, but only knowledge objectives if the SPS requires knowledge-oriented competencies

The **list of resources,** which includes instructional materials the students should use to study and tools and supplies students should have access to in order to complete this guide

The **learning activities,** which include a list of steps students should take in order to master the objectives

An **information sheet,** which may need to be developed if the existing instructional materials do not cover enough content for students to master the objectives

The **self-check,** which consists of questions designed to help students review what they have studied (This is followed by an answer sheet.)

The **activity sheet,** which is designed to help students practice hands-on tasks for the performance objective(s) (If the SPS does not require hands-on activity, this sheet is not included in the learning guide.)

The **written test,** which is to measure the student's achievement on the knowledge objectives

The **performance test,** which is designed to be used by the instructor/evaluator to assess the student's level of achievement on the performance objective(s)

The student learning guide may consist of two or more sets of the above components if the objectives need to be divided into two or more groups. Whatever format you use for the student learning guide, these components should be included in order to incorporate instructional events such as

1. gaining attention
2. stating objectives
3. recalling prerequisites
4. providing instructional stimulus
5. providing learning guidance
6. eliciting performance
7. providing feedback
8. assessing performance
9. enhancing retention and transfer.

**Student Organization Participation**

Vocational student organizations operate pursuant to federal and state laws, which authorize them as viable components of vocational education programs. Both federal regulations and regulations from the Florida State Board of Education authorize vocational student organizations as an integral part of the vocational education program.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills for those in Dental Assisting. These activities are considered an integral part of this instructional program.

**Instructor Standards**

The following description of instructor standards has been abstracted from Accreditation Standards for Dental Assisting Education Programs, which is available from the American Dental Association, Commission on Dental Accreditation:

STANDARD 7--FACULTY

The program shall be staffed by faculty who are well qualified in curricular subject matter, dental assisting functions, and educational methodology.

7.1 QUALIFICATIONS

Dental assisting faculty members shall have background in and current knowledge of dental assisting, the specific subjects they are teaching, and educational methodology.

Instructors who have not earned at least a baccalaureate degree must be working toward that objective. All instructors must have formal education in the subjects they are teaching, beyond the level of the program. Instructors who lack this educational background must demonstrate that they have acquired equivalent knowledge and skill. Instructors must also have completed courses in educational theory and practice (e.g., curriculum development, educational psychology, test construction, measurement, and evaluation) or currently be working toward that objective. Instructors who are dental assistants or dental hygienists should be currently certified* or working toward that objective. It is preferred that instructors be graduates of accredited dental assisting education programs. Clinical instructors shall also have had work experience in the application of four-handed dentistry principles, either as chairside assistants or working with a chairside assistant.

There should be provision for dentists to participate in instruction in dental sciences and delivery of dental care. The extent to which dentists participate in the instructional program should be determined by the specific functions which are taught and the educational and professional background of the faculty.

7.2 NUMBER

The number of full-time equivalent faculty positions shall be sufficient to implement program objectives.

7.3 APPOINTMENT

The majority of faculty positions within the program shall be utilized to appoint full-time faculty.

* Certification by the Dental Assisting National Board, Inc.

7.4 SALARIES

Financial allocations for the program shall assure that the program will be in a competitive position to recruit and retain qualified faculty.

**Updating**

The following updating requirements have also been abstracted from Accreditation Standards for Dental Assisting Education Programs:

7.5 PROFESSIONAL DEVELOPMENT

Opportunities must be provided for individual dental assisting faculty members to continue their professional development.

Faculty members must maintain and improve both their clinical skills and their expertise in educational methodology. Release time and financial support should be provided by the institution for faculty to participate in meetings and activities that contribute to their professional growth in dental assisting and educational methods. A representative of the program should attend at least one national or regional conference or workshop related to dental assisting and/or allied health education per year.

7.6 FACULTY EVALUATION

A formal, objective system of faculty evaluation must be used to promote faculty development.

The faculty evaluation system may include student, administration, and peer evaluation to help identify areas of strengths and weaknesses for each faculty member. These evaluations should be communicated to each faculty member.

**Related Professional Organizations and Support Services**

American Association of Dental Schools
1625 Massachusetts Avenue, NW
Washington, DC 20036

American Dental Assistants Association
666 N Lake Shore Drive, Suite 1130
Chicago, IL 60611

Commission on Dental Accreditation
American Dental Association
211 E Chicago Avenue
Chicago, IL 60611

Dental Assisting National Board, Inc.
216 E Ontario Street
Chicago, IL 60611

Department of Audiovisual Services
American Dental Association
211 E Chicago Avenue
Chicago, IL 60611

Florida Board of Dentistry
Department of Professional Regulation
130 N Monroe Street
Tallahassee, FL 32399-0750

Florida Vocational Association
1420 N Paul Russell Road
Tallahassee, FL 32301

Health Occupations Education
American Vocational Association
1410 King Street
Alexandria, VA 22314

Health Occupations Educators Association of Florida
Dr. Larry Hudson, President
University of Central Florida
Orlando, FL 32816

Health Occupations Students of America (HOSA)
Myra Saley
Department of Education
Knott Building
Tallahassee, FL 32399

Health Sciences Consortium
Distribution Department
201 Silver Cedar Court
Chapel Hill, NC 27514

National Association of Dental Assistants
900 S Washington Street, Suite G-13
Falls Church, VA 22046

National Institute of Dental Research
National Institutes of Health
Westwood Building, Room 522
Bethesda, MD 20892

## INSTRUCTIONAL RESOURCES

The following resources are grouped by media and type: print, ERIC data base, audiovisual, journals, FEIS. They were gathered through a search of data bases and through contact with several leading instructors in dental assisting programs. The materials have been neither extensively reviewed nor selected according to a set of criteria; thus, they should be considered as "suggested" rather than "recommended."

### Print Materials


Anderson, Pauline C., and Burkard, Martha A. The Dental Assistant. Albany, NY: Delmar Publishers, 1987.

Anderson, Pauline C., and Clifford, Susan B. Dental Radiology. Rev. ed. Orlando, Fla.: Delmar Publishers, 1982.

Barton, Roger E., et al., eds. The Dental Assistant. Philadelphia, Pa.: Lea and Febiger, 1988.

Brown, G.; Rene, R. L.; and Bontrager, K. Dental Radiography. St. Louis, Mo.: C. V. Mosby Co., 1985.

Carter, L. M., and Harman, P. Dental Instruments. St. Louis, Mo.: C. V. Mosby Co., n.d.

Chasteen, Joseph E. Essentials of Clinical Dental Assisting. St. Louis, Mo.: C. V. Mosby Co., n.d.

Ehrlich, Ann. Introduction to the Auxiliary's Role in Oral Surgery. Champaign, Ill.: Colwell Systems, 1983.

Ehrlich, Ann. Introduction to the Auxiliary's Role in the Administration of Local Anesthesia. 4th ed. Champaign, Ill: Colwell Systems, 1983.

Ehrlich, Ann. Nutrition and Dental Health. Orlando, Fla.: Delmar Publishers, 1987.

Frommer, Herbert H. Radiology for Dental Auxiliaries. St. Louis, Mo.: C. V. Mosby Co., 1987.

Hall, Sandra F., and Hirsch, Felice Levine. Finger Tip Reference for Dental Materials. Orlando, Fla.: Delmar Publishers, 1981.

Kinn, Mary E. Medical Terminology Review Challenge. Orlando, Fla.: Delmar Publishers, 1987.

O'Brien, C. R. Dental Radiography: An Introduction for Dental Hygienists and Assistants. Orlando, Fla.: W. B. Saunders Co., 1982.

Schwarzrock, S. P., and Jensen, J. R. Effective Dental Assisting. Dubuque, Iowa: William C. Brown Publishers, 1982.

Short, Marjorie J. Essential Oral Anatomies: Teeth, Head, and Neck. Orlando, Fla.: Delmar Publishers, 1987.

Sicher, Harry. Oral Anatomy. St. Louis, Mo.: C. V. Mosby Co., n.d.

Strickland, W. D., and Aldridge, Jr., D. W. Clinical Sciences: Dental Assisting Manual #7. Chapel Hill, N.C.: University of North Carolina Press, 1980.

Torres, Hazel O., and Ehrlich, Ann. 3rd ed. Modern Dental Assisting and Workbook. Orlando, Fla.: W. B. Saunders Co., 1985.

Wiles, C. B., and Ryan, W. J. Communication for Dental Auxiliaries. Old Tappan, N.J.: Appleton and Lange, 1982.

Woodall, et al. Comprehensive Dental Hygiene Care. 3rd ed. St. Louis, Mo.: C. V. Mosby Co., 1989.

**ERIC Data Base**

To order paper copies of the documents listed below, contact ERIC Document Reproduction Service, 3900 Wheeler Avenue, Alexandria, VA 22304, (800) 227-3742. Microfiche copies of ERIC documents are available through Florida Educational Information Service, The Center for Instructional Development and Services, 2003 Apalachee Parkway, Suite 301, Tallahassee, FL 32301-4829, (800) 428-1194.

Allied Health Occupations II, Dental Assistant Component: Student Learning Guide. Middletown Public Schools Curriculum Standards. (1984) Connecticut State Department of Education, Hartford, Connecticut. (ED 251670)

Allied Health Occupations II (Health Careers--Core Curriculum). (1983) Connecticut State Department of Education, Hartford, Connecticut. (ED 251668)

Apfel, Maura, and Weaver, Trudy Karlene. Dental Chairside Technique: Student's Manual. (1981) University of Texas, Austin, Texas. (ED 221658)

Apfel, Maura, and Weaver, Trudy Karlene. Dental Office Procedures: Student's Manual. (1981) University of Texas, Austin, Texas. (ED 221657)

Bilingual Vocational Dental Assistant Training: Program Performance Final Report, August 15, 1979-August 14, 1980. (1980) University of California, University Extension, Los Angeles, California. (ED 211853)

Dental Assistant. (1985) Michigan State University, Michigan Vocational Education Resource Center, East Lansing, Michigan. (ED 259153)

Dental Charting: Learning Activities, Unit Tests, Progress Chart, and Worksheet. (1981) University of Texas, Austin, Texas. (ED 221660)

Eling, David R. Dental Assistant Specialist (AFSC 98150). (1985) Air University, Extension Course Institute, Gunter AFS, Alabama. (ED 268338)

Foster, Phillip R. Resource Guide to Competency-Based Vocational Education: Health Occupations. (1980) Maryland Vocational Curriculum Research and Development Center, College Park. (ED 205694)

Graf, Sandra Kovacs. Managing Dental Office Records: Student's Manual and Instructor's Guide. (1984) University of Texas, Extension Instruction and Materials Center, Austin, Texas. (ED 260188)

A Guide to Task Analysis for Competency Based Education: Health Occupations--Task Linkage. Project Publications No. 4. (1980) Georgia State University, School of Education, Atlanta, Georgia. (ED 193511)

Hayes, Gary E., et al. Health Instruction Packages: Dental Personnel. (1976) League for Innovation in the Community College, Los Angeles, California. (ED202543)

Hefner, Dollie. Dental Assistant, Health Occupations Education. (1981) Oklahoma State Board of Vocational and Technical Education, Curriculum and Instructional Materials Center, Stillwater, Oklahoma. (ED 201817)

Hempler, Nancy A. Curriculum Development of Learning Activity Packets, Dental Assisting Program, Final Report. (1984) Bellingham Vocational-Technical Institute, Bellingham, Washington. (ED 254734)

Lopez-Cox, Guadalupe. Dental Assisting Course. Bilingual Vocational Instructional Materials. (1982) Southwest Texas State University, Department of Occupational Education, San Marcos, Texas. (ED 234208)

McEnery, Paula. Health Instruction Packages: Dental Assisting. (1977) League for Innvoation in the Community College, Los Angeles, California. (ED 202540)

McEnery, Paula. Health Instruction Packages: Office Skills for Dental Assistants. (1976) League for Innovation in the Community College. Los Angeles, California. (ED 202542)

Puerto Rico University, School of Dentistry, San Juan. Puerto Rico Experimental Model: Dental Auxiliary Training Program. The Comprehensive Report, Exhibits A to L. (1980) Health Resources Administration (DHEW/PHS), Bethesda, Maryland. (ED 198403)

Simpson, Bruce, et al. Dental Assistant: Postsecondary Curriculum Guide. (1981) University of Georgia, Athens, Georgia. (ED 216115)

Weaver, Trudy Karlene, and Apfel, Maura. Dental Charting: Student's Manual. (1981) University of Texas, Austin, Texas. (ED 221659)

**Audiovisual Aids**

Brushing and Flossing Techniques. (1983) Produced by Coronet Instructional Films. Distributed by Simon and Schuster, 108 Wilmot Road, Deerfield, IL 60015. 16mm film, 3/4- or 1/2-inch videocassette, color, 8 minutes.

Communicable Diseases in the Dental Environment. (1984) Produced by U. S. Veterans Administration. Distributed by U. S. National Audiovisual Center, General Services Administration, Washington, DC 20409. 16mm film, 3/4- or 1/2-inch videocassette, color, 17 minutes.

The Dental Assistant's Role during a Class II Amalgam Procedure. (n.d.) Produced by RMI Media Productions. Distributed by RMI Media Productions, 2807 W 47th Street, Shawnee Mission, KS 66205. 1/2-inch videocassette, Beta/VHS, color, 24 minutes.

Dental Assistant Utilization--Amalgam Procedure. (n.d.) Produced by U.S. Veterans Administration. Distributed by U.S. National Audiovisual Center, General Services Administration, Washington, DC 20409. 3/4-inch videocassette, color, 19 minutes.

Dental Assistant Utilization--Endodontics: Filling the Root Canal. (n.d.) Produced by U.S. Veterans Administration. Distributed by U.S. National Audiovisual Center, General Services Administration, Washington, DC 20409. 3/4-inch videocassette, color, 10 minutes.

Dental Assistant Utilization--Rubber Base Impression Procedure. (n.d.) Produced by U.S. Veterans Administration. Distributed by U.S. National Audiovisual Center, General Services Administration, Washington, DC 20409. 3/4-inch videocassette, color, 16 minutes.

Dental Assisting--Instrument Transfer. (n.d.) Produced by RMI Media Productions. Distributed by RMI Media Productions, 2807 W 47th Street, Shawnee Mission, KS 66205. 1/2-inch videocassette, Beta/VHS, color, 12 minutes.

Dental Assisting--Maintaining a Clear Field of Operation. (n.d.) Produced by RMI Media Productions. Distributed by RMI Media Productions, 2807 W 47th Street, Shawnee Mission, KS 66205. 1/2-inch videocassette, Beta/VHS, color, 16 minutes.

Forget Me Not--Oral Care for the Bedridden Patient. (1982) Produced by Veterans Administration Medical Center. Distributed by U.S. National Audiovisual Center, General Services Administration, Washington, DC 20409. 3/4- or 1/2-inch videocassette, color, 11 minutes.

**Journals**

Journal of the American Dental Association
211 E Chicago Avenue
Chicago, IL 60611

Journal of Dental Education
1625 Massachusetts Avenue, NW
Washington, DC 20036

**Publishers**

Appleton and Lange
c/o Prentice-Hall
200 Old Tappan Road
Old Tappan, NJ 07675
(800) 223-1360

Books on Demand/UMI
300 North Zeeb Road
Ann Arbor, MI 48106
(800) 521-0600

William C. Brown Publishers
2460 Kerper Boulevard
Dubuque, IA 52001
(319) 589-2963

Colwell Systems
201 Kenyon Road
Champaign, IL 61820
(800) 637-1140

Delmar Publishers
2 Computer Drive, W
Box 15015
Albany, NY 12212-5015
(800) 833-3350

Johnson and Johnson Dental Care Company
Information Center
Grand View Road
Skillman, NJ 08555
(800) 441-1340

C. V. Mosby Company
11830 Westline Industrial Drive
St. Louis, MO 63146
(800) 325-4177

University of North Carolina Press
P. O. Box 2288
Chapel Hill, NC 27514
(919) 966-3561

Praxis Publishing
1530 Judah Street
San Francisco, CA 94122

W. B. Saunders Co.
6277 Sea Harbor Drive
Orlando, FL 32821
(800) 782-4479

**Institution-developed Materials**

Student learning guides, or modules, have been developed at Palm Beach Community College. Topics include preventive dentistry, community dentistry, dental anatomy, preclinical orientation, related theory, and auxiliary procedures. For more information, contact Dr. James Flatley at Palm Beach Community College, 4200 Congress Avenue, Lake Worth 33461, (407) 439-8000.

**FEIS**

As a vocational educator in Florida, you are entitled to the following services provided by the Florida Educational Information Service (FEIS):

1. copyright information
2. a list of instructors teaching in your field in Florida
3. information about curricula and instructional materials in a variety of media
4. custom searches of several data bases for your specified topic.

Contact FEIS, Center for Instructional Development and Services, College of Education, Florida State University, 2003 Apalachee Parkway, Tallahassee, Florida 32301, (800) 428-1194. FEIS will tailor its service to provide you with up-to-date information.

# APPENDIX

## Sample Student Learning Guide

*STUDENT LEARNING GUIDE

SAMPLE

**Program:** Dental Assisting

**Topic:** Chairside Assisting

**Outcome:** Perform Chairside Assisting and Expanded Functions

**SPS 09.04:** Perform Expanded Functions: Prepare, Place, and Remove a Rubber Dam

**Introduction:** The placement and removal of a rubber dam is a state-of-Florida expanded function that is performed in the dental office. A rubber dam is used to isolate the teeth, protect the oral cavity, and allow for greater accessibility for the dental team.

In this learning guide, you will learn to identify rubber dams and rubber dam equipment, describe the proper methods and techniques used in preparing and placing a rubber dam, and demonstrate proper insertion and removal of the dam.

* Adapted from materials provided by the St. Petersburg Vocational-Technical Institute.

## OBJECTIVES

### Knowledge Objectives

After completing this learning guide, you will be able to:

1. list at least five reasons for using a rubber dam
2. explain stamped and template markings on a rubber dam used for an endodontic tooth, anterior teeth, and posterior teeth
3. list the six hole sizes and the use of each
4. explain on which tooth the clamp is used
5. label the parts of the clamp on a diagram
6. list the teeth for which each clamp is generally used
7. state two steps for placing the rubber dam clamp over the tooth
8. explain the term "knifing" the rubber dam
9. explain "inversion" and its purpose
10. list several steps used in removing the rubber dam (based on the slidetape presentation)
11. determine which teeth are to be isolated, given the tooth under treatment.

Criterion: You should achieve a score of at least 85% on the written test.

### Performance Objective

Given rubber dam supplies and equipment, a Synman, and a patient, prepare and place a rubber dam, position the associated armamentarium on both maxillary and mandibular arches (achieving proper isolation without trauma to the teeth and periodontium or unnecessary discomfort to the patient), and properly remove the rubber.

Criterion: You should be checked as satisfactory on all steps of the laboratory and clinical skills tests.

## LEARNING ACTIVITIES

1. Read the text Controlling the Operating Field by Use of the Rubber Dam by R. Cunningham, to identify the use of the rubber dam and the procedure for its placement and removal in various areas of the mouth.

2. Read the folder "Rubber Dam Resources" to identify various rubber dam clamps and their particular areas of usage.

3. View the slidetape presentation Placement and Removing of a Rubber Dam by Dr. Ford.

4. Check your knowledge about rubber dams by completing the Self-check and check your answers with the answer key that follows it.

5. Observe your instructor demonstrating the placement and removal of a rubber dam.

6. Practice placement and removal of a rubber dam on a Synman according to the procedures outlined on the Activity Sheet and the instructor-prepared materials on the resource shelf. Use the Activity Sheet to be sure you are doing each step and doing it correctly.

## SELF-CHECK

**Directions:** Write the answers to the following questions on these pages. You may refer to your resource materials to find the answers.

1. List nine reasons for using a rubber dam.

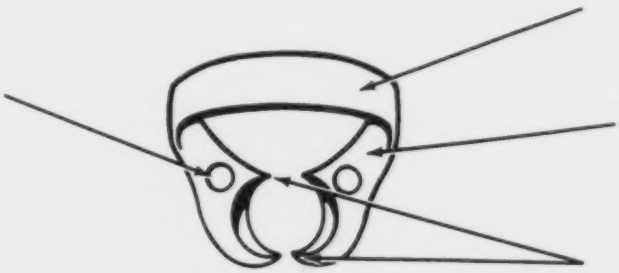
2. How is the rubber dam prepared (stamped or template markings) for an endodontic tooth? For anterior teeth? For posterior teeth?

3. List what the six hole sizes are used for.

4. On which tooth is the clamp used?

(Continued on the next page.)

5. Label the parts of the clamp.



6. For which teeth is each of the following clamps generally used?

   a. W7
   b. W8
   c. W3
   d. W14A
   e. W82 or W8
   f. W2

7. What is tied to the bow of the rubber dam clamp?

8. How is the rubber dam clamp placed over the tooth?

9. What is "knifing" of the rubber dam?

10. What is done to the rubber dam to prevent leakage?

(Continued on the next page.)

SELF-CHECK (continued)

11. List the four steps used in the rubber dam removal procedure (based on the slidetape presentation).

12. If tooth number 5 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

13. If tooth number 7 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

14. If tooth number 19 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

15. If tooth number 23 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

**Now check your answers with the answer key on the following pages.**

## SELF-CHECK ANSWER KEY

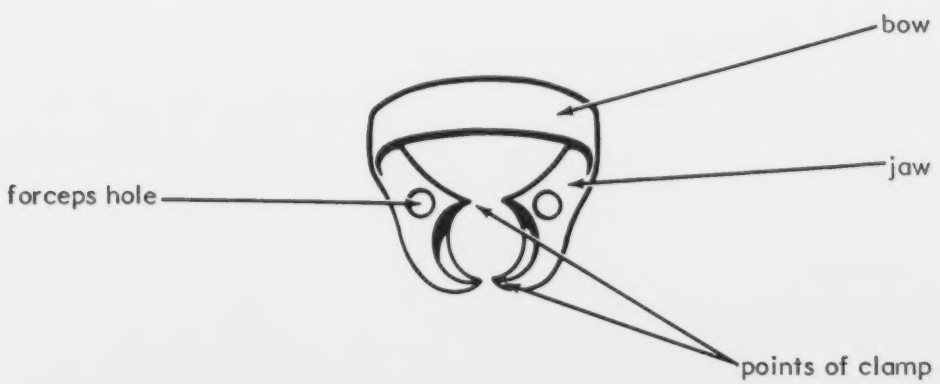
1. a. makes restorations last longer
   b. keeps tooth dry
   c. helps diagnose caries
   d. isolates teeth and makes them accessible
   e. prevents gingival retraction
   f. prevents inhalation of foreign objects
   g. controls gagging
   h. makes tooth preparation faster
   i. eliminates need for rinsing and expectorating

2. a. endodontic--just the tooth to be treated
   b. anterior--the two teeth distal to the tooth to be prepared and to the opposite cuspid
   c. posterior--the two teeth distal to the tooth to be prepared and to the opposite central

3. Number 1. mandibular anteriors (Dr. Ford uses #2 hole)
   Number 2. maxillary anteriors
   Number 3. premolars and cuspids
   Number 4. clamped premolars
   Number 5. molars
   Number 6. clamped molars

4. on the anchor tooth (most distal to the rubber dam)

5.




6. a. (wingless) lower molars
   b. upper molars
   c. upper or lower molars (smaller)
   d. upper or lower (A-partially erupted)
   e. upper or lower molars, partially erupted
   f. any premolar

7. floss

(Continued on the next page.)

SELF-CHECK ANSWER KEY (continued)

8. It is placed over the lingual jaw and then the buccal jaw is slid down.

9. the process of sliding rubber dam material between the teeth

10. It is inverted under the gingiva.

11. a. cut the dam with suture scissor
    b. remove clamp
    c. remove dam
    d. check dam

12. 3, 9

13. 5, 11

14. 17, 23

15. 21, 27

**All of your answers should agree with the above answers. If you have made any errors, go back and repeat one or more of the Learning Activities and/or seek help from your instructor.**

**When you have successfully completed the Self-check and review, continue with the skills activity for the performance objective on the next page.**

SKILLS ACTIVITY SHEET

Directions: Your performance will be evaluated based on the steps listed below. Before requesting evaluation, you should practice these steps. Place a Synman on a dental operatory chair. Gather the rubber dam equipment needed for the performance from the rubber dam tub and practice placing and removing the rubber dam from various positions on the maxillary and mandibular arches. Ask your instructor for feedback if you are not sure about any of the steps.

**Placement of Rubber Dam**

1. Scrubbed hands.
2. Gathered armamentarium for placement of rubber dam: rubber dam material, template or rubber dam stamp, rubber dam punch, rubber dam clamp, rubber dam forceps, rubber dam holder or frame, 14-inch to 16-inch dental floss for ligature, lubricant (shaving cream), mouth mirror, explorer, cotton pliers, dental floss, and suture scissors (or crown-and-bridge scissors) for removal.
3. Placed Synman on dental chair.
4. Scrubbed hands.
5. Did oral exam to determine rubber dam field.
6. Passed floss through contacts of teeth to be isolated.
7. Marked or stamped dull side of rubber dam.
8. Punched rubber dam cleanly without tearing holes, using correct hole size for each tooth to be isolated: anterior teeth--two teeth distal to preparation tooth to opposite cuspid; posterior teeth--two teeth distal to preparation tooth to opposite central.
9. Lubricated the shiny side of the rubber dam with shaving cream.
10. Selected correct rubber dam clamp for anchor tooth.
11. Tied dental floss ligature onto bow of clamp.
12. Placed rubber dam clamp with rubber dam forceps over anchor tooth, placing lingual jaw of clamp first, then buccal jaw with the bow of clamp distal. (All four points of jaws of the clamp must contact the tooth below the height of contour, but not so the clamp impinges on the tissue.)

(Continued on the next page.)

SKILLS ACTIVITY SHEET (continued)

13. Checked for secure hold of clamp by applying slight finger pressure underneath the clamp.

14. Placed the rubber dam over the clamp, bow of clamp first, then jaws. (The powdered or dull side of the dam is toward the operator.)

15. Placed rubber dam over the most anterior tooth punched.

16. Placed rubber dam frame or holder on the dam loosely to help control the dam.

17. Adapted rubber dam over remaining teeth to be isolated. (The dam must be adapted into all interproximal spaces of isolation. To obtain interproximal retention, "knife" the dam through the contacts. Double passage of dental floss through the contacts will also help.)

18. Stretched dam on holder or frame. If necessary, provided airway for patient's nose.

**Removal of Rubber Dam**

1. Clipped dam from interproximal spaces, inserting the finger between the dam and the gingiva, stretching the dam as it is clipped.

2. Removed clamp with rubber dam forceps, lifting--but not sliding--it off tooth.

3. Removed rubber dam and frame slowly and carefully. Did not snap the dam off.

4. Checked rubber dam and frame slowly and carefully.

5. Reexamined all areas to check for lodged pieces of rubber in interproximal areas.

6. Massaged gum tissue, especially the tissue around the clamped tooth.

**When you feel confident that you have achieved this performance skill, ask your instructor for the unit test: Part 1--Knowledge Test; Part 2--Skills (Performance) Test.**

UNIT TEST, PART I--KNOWLEDGE TEST*_____

**Directions:** On a separate piece of paper, record your answers to the following questions. Most are short answers. For the multiple-choice questions, just write the letter of your choice. Do not refer to any materials while taking this test.

1. List five reasons for using a rubber dam.

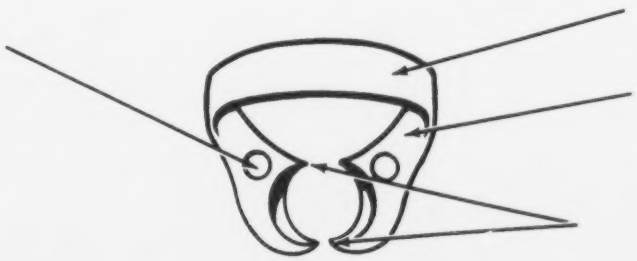
2. State how the rubber dam is prepared (marked) for posterior teeth.

3. For what is each of the following hole sizes used?

   a. Number 2
   b. Number 4
   c. Number 5

4. The clamp is used on the _____ teeth.

5. Label the parts of the clamp.



6. Which clamp would you use for a small upper molar?

   a. W7
   b. W5
   c. W3
   d. W2

(Continued on the next page.)

* Instructor should make copies of this test for each student.

7. Which clamp would you use for any premolar?

   a. W14A
   b. W8
   c. W7
   d. W2

8. State the two steps for placing the rubber dam clamp over the teeth.

9. "Knifing" of the rubber dam refers to

   a. removing the rubber dam after the procedure.
   b. inverting the rubber dam material under gingiva.
   c. cutting the septums of the rubber dam material.
   d. sliding the rubber dam material interproximally.

10. What is meant by inversion, and why is it used?

11. When removing the rubber dam, you should cut the septums with scissors, remove the clamp, and then

    a. remove the dam, slide the lingual jaw down, and anchor the teeth.
    b. massage the gum tissue, knife the rubber dam, and check the dam for missing materials.
    c. remove the rubber dam, check the dam for missing material, and massage the gum tissue.
    d. snap the dam off, check the dam for missing material, and reexamine all areas for rubber.

12. If tooth number 4 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

13. If tooth number 9 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

14. If tooth number 22 is under treatment, the teeth to be isolated will be teeth numbers _____ (anchor tooth) to _____.

**Now return this part of the unit test to your instructor. Next, request that you be checked off on your skills in inserting and removing the rubber dam.**

43

## UNIT TEST, PART I--KNOWLEDGE TEST ANSWER KEY

1. Any five of the following could be listed:

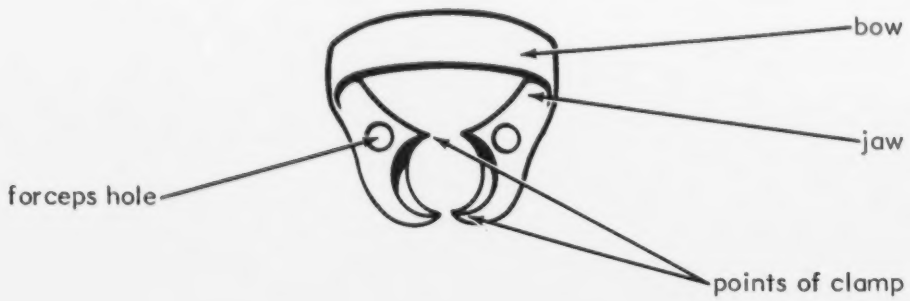
   a. makes restorations last longer
   b. keeps tooth dry
   c. helps diagnose caries
   d. isolates teeth and makes them accessible
   e. prevents gingival retraction
   f. prevents inhalation of foreign objects
   g. controls gagging
   h. makes tooth preparation faster
   i. eliminates need for rinsing and expectorating

2. two teeth distal to the tooth to be prepared and to opposite central

3. a. maxillary anteriors
   b. clamped premolars
   c. molars

4. anchor

5.




6. c

7. d

8. a. Place it over the lingual jaw.
   b. Then, slide the buccal jaw down.

9. d

(Continued on the next page.)

10. "Inversion" means placing the rubber dam material under the gingiva; this is done in order to prevent leakage.

11. c

12. 2, 8

13. 7, 13

14. 20, 26

## UNIT TEST, PART 2--SKILLS TESTS

**Directions:** Sign up with your instructor for one hour of time. You will place and remove a rubber dam from an instructor-designated area of the mouth, first on the Synman, and then on a live patient. Gather the rubber dam armamentarium needed for this performance. Use sterile equipment found in the blue cabinet. Seat your "patients" and place and remove the rubber dam in each situation.

The tooth to be prepared will be Number _____.

**NOTE:** The American Dental Association recommends that, for expanded functions, the student first demonstrate competence in the laboratory with the Synman and then in the clinic with a live patient. Two skills tests are thus included--"Lab" and "Clinic."

(Continued on the next page.)

Evaluator's Copy

## UNIT TEST, PART 2—Lab Skills Test

Student's Name: _____

Evaluator: _____ Date: _____

Attempt: 1 2 3 4 Result: _____ mastery _____ non-mastery

**Directions:** Please check off each step in the following procedures, as the student performs. Do not make remarks to the student.

| Task | Evaluator's Ratings Yes | No |
|---|---|---|
| Placement of Rubber Dam | | |
| 1. Scrubbed hands. | | |
| 2. Gathered armamentarium for placement of rubber dam: rubber dam material, template or rubber dam stamp, rubber dam punch, rubber dam clamp, rubber dam forceps, rubber dam holder or frame, 14-inch to 16-inch dental floss for ligature, lubricant (shaving cream), mouth mirror, explorer, cotton pliers, dental floss, and suture scissors (or crown and bridge scissors) for removal. | | |
| 3. Placed Synman on dental chair. | | |
| 4. Scrubbed hands. | | |
| 5. Did oral exam to determine rubber dam field. | | |
| 6. Passed floss through contacts of teeth to be isolated. | | |
| 7. Marked or stamped dull side of rubber dam. | | |
| 8. Punched rubber dam cleanly without tearing holes, using correct hole size for each tooth to be isolated: anterior teeth--two teeth distal to preparation tooth and to opposite cuspid; posterior teeth--two teeth distal to preparation tooth and to opposite central. | | |

(Continued on the next page.)

UNIT TEST, PART 2--Lab Skills Test (continued)

| Task | Evaluator's Ratings Yes | No |
|---|---|---|
| 9. Lubricated the shiny side of the rubber dam with shaving cream. | | |
| 10. Selected correct rubber dam clamp for anchor tooth. | | |
| 11. Tied dental floss ligature onto bow of clamp. | | |
| 12. Placed rubber dam clamp with rubber dam forcep over anchor tooth, placing lingual jaw of clamp first, then buccal jaw with the bow of clamp distal. (All four points of jaws of the clamp must contact the tooth below the height of contour, but not so the clamp impinges on the tissue.) | | |
| 13. Checked for secure hold of clamp by applying slight finger pressure underneath the clamp. | | |
| 14. Placed the rubber dam over the clamp, bow of clamp first, then jaws. (The powdered or dull side of the dam is toward the operator.) | | |
| 15. Placed rubber dam over the most anterior tooth punched. | | |
| 16. Placed rubber dam frame or holder on the dam loosely to help control the dam. | | |
| 17. Adapted rubber dam over remaining teeth to be isolated. (The dam must be adapted into all interproximal spaces of isolation. To obtain interproximal retention, "knife" the dam through the contacts. Double passage of dental floss through the contacts will also help.) | | |
| 18. Stretched dam on holder or frame. If necessary, provided airway for Synman's nose. | | |

(Continued on the next page.)

**UNIT TEST, PART 2—Lab Skills Test** (continued)

| Task | Evaluator's Ratings Yes | No |
|---|---|---|
| Removal of Rubber Dam | | |
| 1. Clipped dam from interproximal spaces, inserting the finger between the dam and the gingiva, stretching the dam as it is clipped. | | |
| 2. Removed clamp with rubber dam forceps, lifting--but not sliding--it off tooth. | | |
| 3. Removed rubber dam and frame slowly and carefully. Did not snap the dam off. | | |
| 4. Checked rubber dam and frame slowly and carefully. | | |
| 5. Reexamined all areas to check for lodged pieces of rubber in interproximal areas. | | |
| 6. Massaged gum tissue, especially the tissue around the clamped tooth. | | |

Evaluator's Copy

## UNIT TEST, PART 2--Clinic Skills Test

Student's Name: _____

Evaluator: _____ Date: _____

Attempt: 1 2 3 4 Result: _____ mastery _____ non-mastery

**Directions:** Please check off each step in the following procedures, as the student performs. Do not make remarks to the student.

| Task | Evaluator's Ratings Yes | No |
|---|---|---|
| Placement of Rubber Dam | | |
| 1. Scrubbed hands. | | |
| 2. Gathered armamentarium for placement of rubber dam: rubber dam material, template or rubber dam stamp, rubber dam punch, rubber dam clamp, rubber dam forceps, rubber dam holder or frame, 14-inch to 16-inch dental floss for ligature, lubricant (shaving cream), mouth mirror, explorer, cotton pliers, dental floss, and suture scissors (or crown and bridge scissors) for removal. | | |
| 3. Seated patient in dental chair. | | |
| 4. Scrubbed hands. | | |
| 5. Did oral exam to determine rubber dam field. | | |
| 6. Passed floss through contacts of teeth to be isolated. | | |
| 7. Marked or stamped dull side of rubber dam. | | |
| 8. Punched rubber dam cleanly without tearing holes, using correct hole size for each tooth to be isolated: anterior teeth--two teeth distal to preparation tooth and to opposite cuspid; posterior teeth--two teeth distal to preparation tooth and to opposite central. | | |

(Continued on the next page.)

**UNIT TEST, PART 2—Clinic Skills Test** (continued)

| Task | Evaluator's Ratings Yes | No |
|---|---|---|
| 9. Lubricated the shiny side of the rubber dam with shaving cream. | | |
| 10. Selected correct rubber dam clamp for anchor tooth. | | |
| 11. Tied dental floss ligature onto bow of clamp. | | |
| 12. Placed rubber dam clamp with rubber dam forcep over anchor tooth, placing lingual jaw of clamp first, then buccal jaw with the bow of clamp distal. (All four points of jaws of the clamp must contact the tooth below the height of contour, but not so the clamp impinges on the tissue.) | | |
| 13. Checked for secure hold of clamp by applying slight finger pressure underneath the clamp. | | |
| 14. Placed the rubber dam over the clamp, bow of clamp first, then jaws. (The powdered or dull side of the dam is toward the operator.) | | |
| 15. Placed rubber dam over the most anterior tooth punched. | | |
| 16. Placed rubber dam frame or holder on the dam loosely to help control the dam. | | |
| 17. Adapted rubber dam over remaining teeth to be isolated. (The dam must be adapted into all interproximal spaces of isolation. To obtain interproximal retention, "knife" the dam through the contacts. Double passage of dental floss through the contacts will also help.) | | |
| 18. Stretched dam on holder or frame. If necessary, provided airway for patient's nose. | | |

(Continued on the next page.)

| Task | Evaluator's Ratings Yes | No |
|---|---|---|
| Removal of Rubber Dam | | |
| 1. Clipped dam from interproximal spaces, inserting the finger between the dam and the gingiva, stretching the dam as it is clipped. | | |
| 2. Removed clamp with rubber dam forceps, lifting--but not sliding--it off tooth. | | |
| 3. Removed rubber dam and frame slowly and carefully. Did not snap the dam off. | | |
| 4. Checked rubber dam and frame slowly and carefully. | | |
| 5. Reexamined all areas to check for lodged pieces of rubber in interproximal areas. | | |
| 6. Massaged gum tissue, especially the tissue around the clamped tooth. | | |

END OF SAMPLE STUDENT LEARNING GUIDE

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